

**REMARKS**

The Office action of June 10, 2009, has been received and its contents has been noted.

The new independent process claim 53 incorporates the subject matter of prior claims 37 and 41, with dependent new claims 54 to 62 corresponding to prior claims 38 to 40 and 42 to 47, and new independent apparatus claim 63 incorporates the subject matter of prior claims 48 to 51, with new dependent claim 64 corresponding to prior claim 52.

The objection noted in Paragraph 2 of the Office action has been overcome in that in claims 55 and 63 reference is made, in words, to carbon dioxide.

Concerning Paragraph 5 of the Office action, the Examiner's presumption that the subject matter of the claims was commonly owned at the time the invention covered by the claims was made is correct.

In view of the combination of the subject matter of prior claims 37 and 41 into new claim 53 and the combination of the subject matter of prior claims 48 to 51 into new claim 63, it appears that rejections of record set forth in Paragraphs 17 to 22 of the Office action.

Before turning to the specific points raised by the Examiner, a brief summary of the invention is believed to be in order.

The principal difference between the claimed invention and that which is shown in the cited prior art relied on by the Examiner in the rejection of the claims

is that the claimed process and apparatus uses gas for calibration for reliable measuring of TOC (total organic carbon). The use of a liquid standard takes many hours and perishes within a few minutes, a drawback which is avoided by using gas for calibration, which is something that is not shown or made obvious by the prior art. Moreover, the detector is not calibrated separately, rather, it is the entire system, including the thermal reactor and the reaction gas cooler and the other parts within the flow path of a path which are calibrated. Moreover, it is difficult and costly to produce liquid standards with an extremely low amount of content material, as required in the analysis if highly pure water, e.g., for pharmaceutical purposes, as mentioned in claim 62. It is much easier to manage an adequate dosage of the respective content material in a calibration gas.

Moreover, according to the claimed invention, there is used a defined volume of sample, a defined amount of sample is burned such a way that all of the carbon is turned into carbon dioxide, an integral measurement of total amount of carbon is held in the defined amount of sample, no catalysts are needed for the combustions and analysis process, no other chemicals need to be added, and one can analyze aqueous as well as gaseous samples. Moreover, the claims process and apparatus are suitable for continuous measurements taken out of a samples stream as well as for measuring single samples out of a sample vessel.

It should also be noted that the claimed process is a batch process, namely, a process in which a predetermined amount of sample is analyzed. The process and

apparatus are suitable for measuring continuous flow-through systems as well as for measuring single samples.

As mentioned above, the subject matter of the claims now appearing herein were, in the Office action, rejected on a combination of Ejzak, Fabinski and Inoue. These references are discussed in detail in the amendment filed May 11, 2009, and the comments set forth therein are incorporated herein by references, with the following additional comments.

Ejzak does not disclose the use of calibration gas.

Fabinski describes a gas analyzer but does not show the use of gas for calibrating the entire systems, not just the detector. Fabinski does mention the use of a calibrating liquid for setting the sensitivity of the gas analyzer but does not mention or make obvious the use of a calibrating gas for calibrating the entire system. Do note that the comparison gas mentioned by Fabinski is not calibrating gas, and different cuvettes are used for measurement and calibration.

As for Inoue, what is shown therein does not, as mentioned in the prior amendment, involve any calibration.

As mentioned above, all of the reference now appearing herein correspond to prior claims each of which was rejected on the combination of Ejzak, Fabinski and Inoue, and there is simply nothing to support the conclusion that it would be obvious, within the meaning spirit of 35 U. S. C. 103, to combine what is shown in

those references to come up with the process and apparatus defined in claims 53 to 64. Accordingly, it is respectfully requested that the Examiner allow those claims.

In summary, it is submitted that the subject matter of the claims appearing in this application is neither shown in nor made obvious by the prior art relied on by the Examiner in the rejection of the prior claims, and it is respectfully requested, therefore, that the Examiner allow the newly submitted claims 52 to 64.

Should the Examiner believe that a personal conference would be of value to expedite the prosecution of this application, such conference may be arranged by telephoning undersigned counsel. Here it should be mentioned that one of the joint inventors, Dr. Werner Arts, who is the President and Chief Executive Officer of the assignee of this application, and/or applicant's domestic patent counsel, both of whom reside in Germany, would be prepared to join undersigned counsel in such conference, at a time suitable to all concerned.

Respectfully submitted,



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